Day	Date	Class	Period	present	Absent	Total

Themes	Chapter	Lesson	Learning outcomes	Learning aids and sources	Teaching strategies	Activities and methods	Time	Evaluation (assessment)	Home activity
		Adaptation in bats	 Students will be able to: 1- Describe problems affect on survive of organisms. 2- Discover adaptation in bats 3- How can they adapt at night? How can they adapt in day? How can they fly although they aren't birds?Let's know How? 	Video	Brain storming Working in groups	Introduction: Ask students about Some problems affect on survive of organisms. Some people think that bats are scary creatures but in fact, *Bats have: 1- long arms, thin and light finger, 2- Special mouth to eat insects *Bats behavior: 1- Bats sleep upside down to take off in flight 2- Bats have special structure (wings) allows to fly *Bats feed on: (Bees and butterflies help plants and flowers in transferring pollen grains) *Bats are: 1- Nocturnal organisms as they are more active at night they depend on "echolocation" 2- Bats are active at night to hunt easily *Bats can't see well at night, how can they catch insects? • Bats produce sound waves, these sound waves return back when they meet insects which allow bat to see by the effect of sound		Complete:- Night _ plants _ body structure _ insect _ upturn _ echolocation 1. Bats have help it to fly 2. Bats feed on 3. Bats help as butterflies 4. Bats sleep 5. The bats are animals 6. Bats can fly by	Search about communicat ions in bats



Day	Date	Class	Period	present	Absent	Total

Themes	Chapter	Lesson	Learning outcomes	Learning aids and sources	Teaching strategies	Activities and methods	Time	Evaluation (assessment)	Home activity
		Adaptation in penguins and polar bear	 Students will be able to: 1- Describe the habitat which penguin live in . 2- Discover adaptation in penguins 3- Discover types of adaptations 	Video	Brain storming Working in groups	Introduction: How is Adaptation of penguins in this cold environment? How is Adaptation of penguins in this cold environment? 1-They have structural adaptation 2- They have feathers to keep warm 3- They have paddle like flippers (wing movement) for swimming 4- They have blubber (fats) to keep warm * Why don't Penguin's feet freeze? Because they can control the warm blood flow to their feet to keep it warm, and they also have a system of blood vessels that reduces heat loss from their bodies, these both help them to keep their feet a few degrees above freezing **Polar bear: Has thick white fur that helps it to feel warm and hide in the snow to catch its prey **Black or brown bear: Has dark brown fur helps it hide in the trees while hunting.		Choose: 1-The penguin lives in (hot climate _ arctic climate _ rainy climate) 2.the help penguin to make its feet warm (blood _ skin _ fur) 3.The movement of blood can the penguin's feet (cold _tall _ warm)	

